

REMARKS

The present application includes claims 1-23. Claims 1-23 have been rejected. By this Response, claims 2, 9, and 14 have been amended.

By this Response, claim 2 has been amended to clarify that the first and second codes comprise first and second Golay codes. Claim 9 has been amended to specify that each of the plurality of signals is encoded with one of the plurality of complimentary codes. Claim 14 has been amended to specify that the waveform generator encodes each of the plurality of ultrasound signals with a single code. The Applicant submits that at least claims 2, 9 and 14, as well as their dependent claims 10-13 and 15-23, should be allowable at least in view of these amendments.

Claim 14 was objected to because of the use of "a plurality of" versus "the plurality of". By this Response, appropriate correction has been made, and the Applicant submits that the objection has been overcome.

By this Response, the Applicant has also amended the Abstract of the Disclosure and requests that the Examiner's objection be withdrawn.

Claims 1-3, 7, and 9-11 have been rejected under 35 U.S.C. 102(b) as being anticipated by Chiao '869 (U.S. Patent No. 5,984,869).

However, the Chiao '869 patent, as referenced in the background section of the present application, relates to use of a pair of Golay codes used in *two* data acquisitions rather than the single acquisition of the present application. In Chiao '869, Golay coded excitation is done in

two acquisitions with a first set of codes in a first acquisition and a second set of codes in a section acquisition. In Chiao '869, "[a] pair of Golay-encoded base sequences are transmitted consecutively on each beam, i.e., during first and second firings having the same focal position." Col. 5, lines 12-15; *see also* col. 2, lines 32-63 and col. 3, lines 13-20. In pending claims 1-3, 7, and 9-11, a first code is transmitted on a first beam and a second code is transmitted on a second beam, rather than both codes being transmitted on both beams.

Therefore, for at least these reasons, the Applicant submits that claims 1-3, 7, and 9-11 should be allowable over the art of record.

Claims 14-23 have been rejected under 35 U.S.C. 102(b) as being anticipated by Chiao '618 (U.S. Patent No. 6,375,618).

Again the Chiao '618 reference, as with the Chiao '869 reference, transmit waveforms are phase encoded using a two-code pair for each transmit waveform. Abstract and col. 3, lines 30-37. A transmit waveform of Chiao '618 includes Golay code biphasic pairs or sequences (col. 8, line 25 – col. 9, line 13), rather than providing a waveform generator to encode each of the plurality of ultrasound signals with a single code.

Therefore, for at least these reasons, the Applicant submits that claims 14-23 should be allowable over the art of record.

Claims 4, 8 and 12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Chiao '869 in view of Philips (U.S. Patent No. 6,213,947).

The Chiao '869 patent has been discussed above and does not teach or suggest the limitations of claims 1 and 9, from which claims 4, 8 and 12 depend. Philips also fails to teach

or suggest the limitations of independent claims 1 and 9. Therefore, since Philips is unable to cure the deficiencies outlined above in the Chiao '869 patent, the combination of Philips and Chiao '869 does not teach or suggest the limitations of claims 1 or 9, let alone dependent claims 4, 8 and 12. Thus, the Applicant submits that claims 4, 8 and 12 should be allowable over the art of record.

Claims 5, 6 and 13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Chiao '869.

The Chiao '869 patent has been discussed above and does not teach or suggest the limitations of claims 1 and 9, from which claims 5, 6 and 13 depend. Since Chiao '869 does not teach or suggest the limitations of claims 1 or 9, let alone dependent claims 5, 6 and 13, the Applicant submits that claims 5, 6 and 13 should be allowable over the art of record.

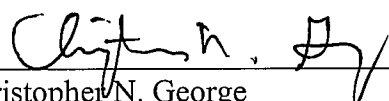
CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully requested. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 070845.

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Respectfully submitted,



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